

Remarks

Claims 1-40 are pending. Claims 16-30 were rejected. Claims 1-15 and 31-40 were withdrawn.

The specification

The Examiner commented on the part of the specification in paragraphs 22 and 24 as published that the perfect arrangement of the two monomers in the polymer product as discussed therein appears unusual and thus questioned the accuracy of the description of teachings by the references cited therein, namely, Zhang, et al., Polymer 40:1341-1345 (1999) ("Zhang"); Modena, et al., J. of Fluorine Chemistry 43:15-25 (1989) ("Modena"); and Ying, et al., American Chemical Society Conference, Boston, MA, Polymer Preprints 39(2):843-844 (1998) ("Ying"). Applicant respectfully directs the Examiner's attention to Zhang, Scheme I (page 1343, top) and Ying, Scheme I (page 843, right column, middle), where Br-PVDF-Br and styrene were copolymerized, generating a symmetric block copolymer with two terminal bromo groups. Further, Modena describes the formation of symmetrical block copolymers (see Table 1) by radical telemerization of vinylidene fluoride in the presence of 1,2-dibromotetrafluoroethane. Accordingly, the specification in paragraphs 22 and 24 has adequate support to one of ordinary skill in the art.

Rejection under 35 U.S.C. 112, second paragraph

Claims 16-30 were rejected in that the term "non-fluorinated block" is allegedly indefinite because it may include fluorinated substituents. Applicant points out that in the present application, the term "non-fluorinated block" is used as opposite to the term "fluorinated block". The term "fluorinated block" as defined in the specification requires

at least one fluoro group directly bonded to a carbon atom in the backbone of the fluorinated block (see, page 5, line 3 to page 6, line 3). In contrast, the term “non-fluorinated block” as defined in the specification refers to a block having no fluorine atom directly bonded to an atom in the backbone of the block (see, page 6, line 5 to page 7, line 14). The term “non-fluorinated block” is therefore clear to one of ordinary skill in the art.

Rejections under 35 U.S.C. 102(b)

Claim 16 was rejected as anticipated by U.S. Patent No. 4,412,054 to Yamabe (“Yamabe”). The Examiner alleged that the formula as described in Abstract and Example 1 of Yamabe anticipates claim 16.

Claim 16 is amended to define the fluorinated block recited therein as a poly(fluoroalkene) (support is found at page 5, lines 9-12). Claim 16, as amended, is now directed to a device having a coating thereon that contains a block copolymer having a fluorinated block which is a poly(fluoroalkene). This block copolymer is certainly different from the formula as described in Abstract and Example 1 of Yamabe. Therefore, claim 16 is patentably allowable over Yamabe.

Claim 16 is further rejected as anticipated by U.S. Patent No. 5,219,662 to Grimminger et al. (“Grimminger”). In particular, the Examiner stated Grimminger describes using a block copolymer having fluorinated and non-fluorinated blocks to coat tubes that can be used in vivo. As discussed above, claim 16 as amended requires the fluorinated block defined therein to have a perfluorinated alkane block. In contrast, Grimminger describes a block copolymer having a block that bears a fluorinated pendant group. As such, claim 16 is patentably allowable over Grimminger.

Rejections under 35 U.S.C. 103

Claims 21 and 26 were rejected as obvious over Grimminger in view of US Publication No. 2002/0082679 by Sirhan et al. ("Sirhan) and U.S. Patent No. 6,344,035 to Chudzik ("Chudzik"). As discussed previously, Grimminger does not describe a block copolymer having a poly(fluoroalkene) as the fluorinated block. In addition, both Sirhan and Chudzik fail to describe a block copolymer having a poly(fluoroalkene) block. Further, the combination of Grimminger, Sirhan and Chudzik also fails to describe a block copolymer having a poly(fluoroalkene) block. Accordingly, claims 21 and 22 are patentably allowable over Grimminger in view of Sirhan and Chudzik.

Claims 21 and 26 were rejected as obvious over Yamabe in view of Sirhan and Chudzik. As discussed above, Yamabe does not describe a block copolymer having a poly(fluoroalkene) block. Sirhan or Chudzik also fail to describe a block copolymer having a poly(fluoroalkene) block. Thus, the combination of Yamabe, Sirhan, and Chudzik does not describe a block copolymer having a poly(fluoroalkene) block. Accordingly, claims 21 and 26 are patentably allowable over Yamabe in view of Sirhan and Chudzik.

CONCLUSION

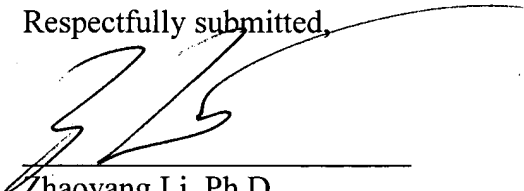
Withdrawal of the rejections and allowance of the claims is respectfully requested. Should the Examiner have any questions regarding this communication, the Examiner is invited to contact the undersigned at the telephone number shown below.

The undersigned authorizes the examiner to charge any fees that may be required or credit of any overpayment to be made to Deposit Account No. 07-1850.

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Respectfully submitted,



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